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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,771	08/25/2006	Hideki Ikarashi	050070-0115	2492

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EXAMINER	
BROOKS, JERRY L.	

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2878	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/590,771	IKARASHI ET AL.	
	Examiner	Art Unit	
	JERRY BROOKS	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 October 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is a response to argument filed on 08/25/2009.

Acknowledgement

The arguments filed on 10/30/2009, responding to the Office Action mailed on 08/25/2009, have been entered. The present Office Action is made with all the arguments being fully considered. Accordingly, pending in this Office Action are claims 1-5.

Claim 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being obvious over Hegg et a1.(5,121,099) in Nojima et al. (5,764,139) and further in view of Erskine (5,805,119).

With respect to claim 1, Hegg discloses a vehicle information display apparatus comprising (fig.l): first display (11, pointer type display device) for displaying first predetermined information as a first display image (see fig.2);a second display (12, LCD: col.3, 14)for displaying second predetermined information (see fig.3) as a second display image; and a controller for controlling operating states of the first and second display (Hegg teaches that the first and second image sources can be displayed independently to provide a two-page display wherein the source to be displayed would be illuminated while the other source will not be illuminated; therefore a controller for controlling operating states of the first and second display is implicitly disclosed.), and displaying the first and second display images in a predetermined display area (window 19), characterized in that the first display (11) is adapted to be capable of switching

between a displayed state (wherein the source 11 is illuminated) and a hidden state (wherein the source 11 is not illuminated) of a part of the first display image (portions of display 11 can be selectively illuminated and thereby switched to a partly hidden and partly displayed state) the second display (12) is adapted to be capable of enlarging and reducing the display range of the second display image (fig.3) (this can be achieved by enlarging and reducing areas (portions) of illumination of the second display) wherein the first display s (11) and the second display (12) are arranged so as to oppose to each other with the intermediary of a transmissive reflecting member (13) that combines the respective display images by transmitting the display image on one of the first display and the second display and reflecting the display image on the other one of them (see light from 11 and 12 in fig.l).

Hegg does not disclose the controller switches the part of the first display image into the hidden state in association with enlargement of the display range of the second display image and switches the part of the first display image into the displayed state in association with reduction of the display range of the second display image and the light emitting device of the first display being an LED and does not disclose further comprising a concave surface mirror member that directly receives the combined first and second display images from the transmissive reflecting member and reflects the combined images to a user.

Nojima a vehicle information display apparatus wherein a display (12) is adapted to be capable of enlarging and reducing the display range of a second display image (fig.3 image(l)) (In fig.3, image (1) is larger when image (2) is in a hidden state and smaller

when both images are displayed), and a controller (fig.l, a microcomputer 16, a program storage and storage means (col.3, lines 45-54) and a display drive means 12) switches the part of a first display image into the hidden state in association with enlargement of the display range of the second display image (image (2) is hidden when image (1) is largest) and switches the part of the first display image into the displayed state in association with reduction of the display range of the second display image (In fig.3, image (1) is smaller when both images are displayed).

It would have been obvious at the time of invention to one of ordinary skill in the art to modify the invention of Hegg with the controller of Nojima to switch the part of the first display image into the hidden state in association with enlargement of the display range of the second display image and switches the part of the first display image into the displayed state in association with reduction of the display range of the second display image so that the driver of the vehicle can be provided with only the necessary amount of information (col.2, 40-47).

Hegg in view of Nojima do not disclose further comprising a concave surface mirror member that directly receives the combined first and second display images from the transmissive reflecting member and reflects the combined images to a user.

Erskine teaches a vehicle display apparatus (fig.14) using a concave surface mirror member (110) that directly receives the images and reflects them to the user (again, fig.14).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify the vehicle display apparatus of Hegg in view of Nojima so that a concave

surface mirror member that directly receives the combined first and second display images from the transmissive reflecting member and reflects the combined images to a user to reduce the material cost.

With respect to claim 3, Hegg in view of Nojima and further in view of Erskine discloses the vehicle information display apparatus according to Claim I,

Nojima discloses a vehicle information display apparatus characterized in that the controller (fig. 1) determines whether or not the changing/switching conditions (see fig.2: order of priority and see steps s103, s104, s107, s108 of fig.3) for switching the display of the first display image (see image (2)) in association with the change of the display range of the second display image (see wherein if the range of the second display image (1) is changed, the first image (2) is switched) is satisfied according to the first and second supplied information (see fig.13 wherein first and second supplied information determine the priority) and, when the changing/switching conditions (see fig.2: order of priority and see steps s103, s104, s107, s108 of fig.3) are satisfied, changes the display range of the second display image and switches the display of the first display image (compare s105 to s106 wherein the display range of the second image (1) is changed and the display of the first display image is switched).

With respect to 4, Hegg in view of Nojima and further in view of Erskine discloses the vehicle information display apparatus according to Claim I, Hegg does not disclose characterized in that the changing/switching conditions can be changed by a user.

Nojima discloses a vehicle information display apparatus characterized in that the changing/switching conditions can be changed by a user (co1.8 lines 65 - co1.9 lines 1-2).

It would have been obvious at the time of invention to one of ordinary skill in the art to modify the invention of Hegg in view of Nojima and Kino with the teaching of Nojima so that the changing/switching conditions can be changed by the user to make the invention user friendly.

With respect to 5, Hegg in view of Nojima and further in view of Erskine discloses the vehicle information display apparatus according to Claim I, Hegg discloses characterized in that the first display is a pointer-type display device (11), and the second display (12) is an image display device for displaying a plurality of different contents or types of second predetermined information as the second display image in a multiplex or interchangeable manner (see co1.3, lines 35-40).

Claim 2 is rejected under 35 U.S.C. 103(a) as being obvious over Nojima (5,764,139) in view of Hegg et a1.(5,121,099) and Erskine (5,805,119).

With respect to claim 2, Nojima discloses a method of displaying vehicle information to a user, comprising: displaying a first display image (the screen image 110) which provide a first predetermined information (see fig.5) and whose display state is partly switched between a displayed state and a hidden state (see fig.6), and displaying a second display image (shift information image: see SHIFT in figures 5 and 6) which provides a second predetermined information (shift information) and whose display range is enlarged and reduced in a predetermined display area (see fig.5 in which the display range is reduced and fig.6 in which the display range is enlarged), characterized in that a part of the first display image is switched to the hidden state (see fig.6 where part of the display image 110 is hidden by shift information image) in association with enlargement of the display range of the second display image (in fig. 6, when the display range of the second display image is enlarged, it covers part of the display image 110), and the part of the first display image is switched to the displayed state in association with reduction of the display range of the second display image (see fig.5 wherein the part which is hidden in fig. 6 is displayed in fig. 5).

Nojima does not disclose combining the first display image and the second display image by a transmissive reflecting member, directly receiving the combined first and second image by a concave mirror member from the transmissive reflecting member and, reflecting the combined first and second image by the concave mirror member to the user.

Hegg discloses a method of displaying vehicle information to a user comprising combining the first display image and the second display image by a transmissive reflecting member (fig.1,13).

It would have been obvious to one of ordinary skill in the art to modify the method step of Nojima with the method step Hegg of to reduce the cost.

Hegg in view of Nojima does not disclose the method step of directly receiving the combined first and second image by a concave mirror member from the transmissive reflecting member and, reflecting the combined first and second image by the concave mirror member to the user.

Erskine discloses a method of displaying vehicle information to a user comprising directly receiving image by a concave mirror and reflecting the image by the concave mirror member to the user.

It would have been obvious to one of ordinary skill in the art to modify the method step of Nojima in view of Hegg with the method step Erskine so that the combined first and second image is directly received by a concave mirror member from the transmissive reflecting member and, the combined first and second image is reflected by the concave mirror member to the user to reduce material cost.

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Response to Arguments

Applicant's arguments with respect to claim 1-5 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JERRY BROOKS whose telephone number is (571)270-5711. The examiner can normally be reached on Monday-Friday, 9 a.m.- 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JERRY BROOKS/
Examiner, Art Unit 2878

/Georgia Y Epps/
Supervisory Patent Examiner, Art Unit 2878